

BORG-WARNER AUTOMOTIVE (CANADA) LTD.

Simcoe, Ontario

"Borg-Warner Automotive is always under pressure to cut costs and reduce prices. We also are conscious of the need to conserve non-renewable natural resources for future generations. An analysis of our plant in 1993, conducted with the assistance of the Ministry of Environment and Energy, helped us to identify a number of areas where energy efficiency could be improved and money saved."

Roger Archibald
Plant Manager
Borg-Warner Automotive (Canada) Ltd.

THE COMPANY

Borg-Warner Automotive is a leading supplier of highly engineered components and systems which are used primarily in the manufacture of automotive drivetrains. The company has manufacturing plants in nine countries serving the North American, European and Asian markets.

Its subsidiary, BWA (Canada) Ltd., manufactures Morse timing chains and Hy-Vo drive chains for the North American market at a plant in Simcoe, Ontario.

THE CHALLENGE

In 1993, BWA set out to reduce its energy consumption and save money. Metatech Associates was contracted to review the company's operations.

Metatech made a number of suggestions. One of the easiest to carry out was to use the waste heat from the heat treating furnaces, which was vented inside the plant, to reduce the building's heating requirements and improve air quality for employees.

OPPORTUNITIES

By installing two fans and a tubing distribution system, the hot air at the ceiling could be mixed with fresh out-



The Simcoe plant of Borg-Warner Automotive.

side air and distributed to the floor level of the factory where the employees work. This would improve the building's air quality and reduce the consumption of natural gas for heating.

ACTION TAKEN

BWA installed two power tube fans on the roof of the building and 60 metres of flexible tubing 76.2 centimetres in diameter along the ceiling.

RESULTS

The new system has been used for two winters with good results. Air quality and temperature uniformity in the building have improved and the system has already paid for itself in energy savings.

REPLICATION OPPORTUNITIES

This type of low cost system for saving waste heat may be practical where process equipment exhausts heat into a plant or directly outside.

PARTNERSHIP IN POLLUTION PREVENTION AND RESOURCE CONSERVATION

Industrial companies doing business in Ontario may seek ministry/industry services that will help them to:

- * use energy and water more efficiently;
- * reduce, reuse and recycle solid waste;
- * reduce or eliminate liquid effluents and gaseous emissions.

Equipment and service supply companies can benefit from the information provided on technologies identified for business development.

**FOR FURTHER INFORMATION,
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**MINISTRY OF ENVIRONMENT
AND ENERGY SERVICES**

For information on Ministry of
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This project profile was prepared and published as a public service by the Ontario Ministry of Environment and Energy. Its purpose is to transfer information to Ontario companies about findings and recommendations of a resource conservation and environmental analysis conducted by a consulting engineering firm at an industrial plant in Ontario.

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